

## **CLAIMS**

What is claimed is:

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1. A photopolymer package for use in making a hand stamp plate, the package consisting of a sealed sachet and a curable liquid photopolymer preparation contained in the sachet, the sachet being formed of material which is releasable from the cured photopolymer.

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2. The package of claim 1 wherein the sachet is rectangular and has four sides, all of which sides comprise seals between opposed sheets of said material.

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3. The package of claim 1 wherein the sachet is rectangular and is formed of a single sheet of said material, the sachet having four sides, three of said sides comprising seals between opposed portions of said sheet and one of said sides comprising a fold between said portions.

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4. The package of claim 1 wherein the photopolymer comprises an unsaturated polyurethane resin.

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5. A method for forming a photopolymer package adapted for use in making a hand stamp, the method comprising filling an envelope with a photocurable liquid polymer and sealing the envelope to form such a package consisting of a sealed sachet and said polymer, the envelope being made of material which is releasable from the cured photopolymer.

6. The method of claim 5 wherein the envelope comprises a pre-formed pouch formed from a sheet or sheets neither of which adheres to the cured photopolymer and has a mouth formed between adjoining portions of the sheet or sheets to receive the liquid curable polymer, the method comprising introducing the photocurable liquid polymer into  
5 the pouch by way of the mouth to fill the envelope to a level less than its capacity; applying a vacuum to draw the sides of the pouch together above the level of the photopolymer; and then sealing the adjoining portions of the sheet or sheets together to form a package consisting of a sealed sachet and said polymer.

10 7. The method of claim 5 wherein the envelope is sealed in a vacuum packing machine.

8. The method of claim 5 which is a form-fill-seal process which comprises: forming the envelope from a sheet or sheets, neither of which adheres to the cured photopolymer,  
15 the envelope having a mouth formed between adjoining portions of the sheet or sheets to receive the liquid curable polymer; introducing the photocurable liquid polymer into the envelope by way of the mouth of the envelope to fill the envelope; and then sealing the portions of the sheet or sheets together to form the package.

20 9. The method of claim 8 which comprises a vertical fill-form-seal technique.

10. The method of claim 5 wherein the envelope is formed from two sheets.

11. The method of claim 5 wherein the envelope is formed from a single sheet.

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12. A receptacle for use in forming a photopolymer package, comprising an envelope of plastics sheet material, the plastics sheet material having a thickness of from 30 µm to

180 µm and the characteristics that it is heat sealable, substantially transparent to actinic radiation, and if contacted with photosetting resin during curing of same it can thereafter be released from the cured resin, the envelope having opposed major surfaces, each major surface having three edge regions which are arranged as three sides of a rectangle generally of hand stamp size and are sealedly connected to an opposed edge region of the other major surface, and the region of each major surface which is located in the position of the fourth side of the rectangle between end regions of two of said three edges, defining together with an opposed region of the other major surface a mouth to receive liquid photosetting resin.

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13. The receptacle of claim 12 which is made of

(i) two separate sheets of plastics material, wherein the sealedly connected edge regions are connected together by heat sealing; or

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(ii) a single sheet of plastics material, wherein the sealedly connected edge regions are at one said side connected as one piece, the sealedly connected edge regions at the remaining two of said three sides being connected together by heat sealing.

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14. The receptacle of claim 13 which is adapted to have a thickness of from 2.2 mm to 3.2 mm when filled with a liquid.

25 15. The receptacle as claimed in claim 12 in which the surfaces of the envelope are made of the same material.

16. The receptacle as claimed in claim 12 wherein the material comprises one or more polyolefins.
17. The receptacle as claimed in claim 12 wherein the material is selected from the group consisting of polyolefins, oriented polyamide, polyethylene terephthalate, modified polyethylene terephthalate and laminates thereof.
18. The receptacle as claimed in claim 17 wherein the material is selected from the group consisting of polyolefins and laminates of polyethylene with a polyethylene terephthalate product.
19. The receptacle as claimed in claim 12 wherein the thickness of the plastics sheet material is in the range from about 50  $\mu\text{m}$  to about 100  $\mu\text{m}$ .
- 15 20. The receptacle as claimed in claim 12 wherein the thickness of the plastics sheet material is in the range from about 50  $\mu\text{m}$  to less than about 95  $\mu\text{m}$ .
21. The receptacle as claimed in claim 17 wherein the thickness of the plastics sheet material is in the range from about 60  $\mu\text{m}$  to about 90  $\mu\text{m}$ .
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22. The receptacle as claimed in claim 15 wherein:  
the material is selected from the group consisting of polyolefins and polyolefin laminates; and  
the thickness of the sachet walls is from about 50  $\mu\text{m}$  to about 100  $\mu\text{m}$ .
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23. The receptacle of claim 13 wherein the resin comprises a polyether polyester urethane methacrylate, the thickness of the walls of the envelope is in the range from about

60  $\mu\text{m}$  to about 90  $\mu\text{m}$  and the walls are made of a material selected from the group consisting of polyolefins and polyolefin laminates.

24. A photopolymer package adapted for use in making a hand stamp plate, the  
5 package consisting essentially of a sealed sachet and, contained in the sachet, a curable liquid photopolymer preparation which, when the package is exposed to curing radiation, cures to form a cured photopolymer of hand stamp quality, the walls of the sachet being formed of material which is releasable from the cured photopolymer.
- 10 25. The photopolymer package as claimed in claim 24 wherein the walls of the sachet are made of the same material, the material having a high degree of crease resistance and UV transmittance but not seriously diffracting transmitted UV radiation.

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